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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/582,238 | 06/09/2006 | Daisuke Kanenari | 21713-00031-US1 | 1668 |
| 30678 | 7590 | 03/31/2009 | EXAMINER | |
| CONNOLLY BOVE LODGE & HUTZ LLP | | | BUIE, NICOLE M | |
| 1875 EYE STREET, N.W. | | | ART UNIT | PAPER NUMBER |
| SUITE 1100 | | | | 1796 |
| WASHINGTON, DC 20006 | | | MAIL DATE | DELIVERY MODE |
| | | | 03/31/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/582,238 | Applicant(s) KANENARI ET AL. |
| | Examiner NICOLE M. BUIE | Art Unit 1796 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 15 January 2009.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) 7,14,22 and 27-29 is/are withdrawn from consideration.

5) Claim(s) 8-13,15-21, and 23-26 is/are allowed.

6) Claim(s) 1-4, and 6 is/are rejected.

7) Claim(s) 4 and 5 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Response to Amendment

The amendment filed on 01/15/2009 has been entered. Claims 1-29 remain pending in the application.

Election/Restrictions

It is noted that Applicants state that claims 7, 14, 22, and 27-29 are drawn to non-elected invention and may be cancelled by the Examiner upon the allowance of the claims directed to the elected invention.

Claim Objections

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4 recites the same polymers as claim 1. Therefore, claim 4 is not further limiting.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites the polymer is at least one member selected from the group consisting of NR, BR, and SBR. However, the instant specification does not disclose mixtures of the said polymers at page 8, lines 4-8. It is suggested to remove the phrase “at least” in claim 1 at line 4.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (JP 11-292978 A, see machine translation for citation).

Regarding claims 1 and 4, Kawahara et al. discloses a method for producing a polymer composition containing a filler ([0013], [0024]) comprising simultaneously spraying (“atomizer”) and drying a synthetic resin aqueous such as SBR emulsion using a shock wave dryer (claim 1),.

It would have been obvious to one of ordinary skill in the art at the time of invention to add a filler, such as calcium carbonate, clay, or silica to improve storage stability of synthetic resin powder ([0028], [0029]).

Optionally, it would have been obvious to one of ordinary skill in the art at the time of invention to add a stabilizer, such as polybutadiene or a natural water soluble polymer of polyacrylamide to a polymer composition [0021].

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients with a similar method. Therefore, the claimed effects and physical properties, i.e. work or heat efficiency without causing heat degradation or gelling of polymer would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Regarding claim 2, Kawahara et al. discloses adding the fillers before spray drying [0029]-[0030].

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (JP 11-292978 A, see machine translation for citation) as applied to claim 1 above, and further in view of Chandran et al. (US 5,842,289).

Regarding claim 6, Kawahara et al. discloses a method as shown above in claim 1. Kawahara et al. further discloses a temperature of a drying chamber of the atmosphere of the

shock wave generated from pulse combustion for spraying the liquid containing a polymer composition is 40-80°C [0026].

However, Kawahara et al. does not disclose frequency of pulse combustion. Chandran et al. teaches a frequency of pulse combustion in a range of from about 50 to about 500 Hz (C3/L12-19). Kawahara et al. and Chandran et al. are concerned with the same technical difficulty, namely drying using a pulse combustion device. It would have been obvious to one of ordinary skill in the art at the time of invention to try to use the frequency as taught by Chandran et al. in a process of Kawahara et al. which is a suitable range with a similar device.

Response to Arguments

Applicant's arguments filed 01/15/2009 with respect to claims 1-6, 8-13, 15-21, and 23-26 have been fully considered and are persuasive. The rejection of claims 1-6, 8-13, 15-21, and 23-26 has been withdrawn. The following comments apply:

- A) Since Takana et al. (EP 1306424) does not teach or suggest the specific polymers or fillers of claim 1, the previous rejection under Takana et al. has been withdrawn.
- B) Since Jeffs (US 5,028,482) teaches a process for the production of a latex-coated inorganic filler, which differs completely from the production of NR, BR, and/or SBR containing the specified filler according to the present invention, the previous rejection under Jeffs has been withdrawn (see Applicants response filed on 01/15/2009, page 10).
- C) Since copending application 10/588102 does not recite the specific polymers and fillers of instant claim 1, the previous double patenting rejection has been withdrawn.

Allowable Subject Matter

Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 8-13, 15-21, and 23-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the closest prior art of record, Kawahara et al. in view of Chandran et al. does not teach or suggest the specific viscosity of polymer mixture as recited in claim 5. Furthermore, Kawahara et al. does not teach or suggest natural rubber or carbon black. Therefore, claims 5, 8-13, 15-21, and 23-26 are deemed nonobvious over the prior art of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. M. B./
Examiner, Art Unit 1796
3/25/2009

/Marc S. Zimmer/
Primary Examiner, Art Unit 1796